31mar03 16:29:19 User015070 Session D8619.1
Sub account: SUGIM38.001AUS-CSP

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******ENGLISH ABSTRACT FOR SU 1640542 (CHERNOVITSKY)******

File 351:Derwent WPI 1963-2003/UD,UM &UP=200321
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Set	Items	Description
?ss an,pn=(su 1640542 or ru 1640542) and ad,pd=910407		
S1	0	AN=SU 1640542
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S5	19	AD=910407
S6	1581	PD=910407
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DIALOG(R)File 351:Derwent WPI
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008856436 **Image available**
WPI Acc No: 1991-360457/*199149*
Determining optical anisotropy of transparent specimens - using coherent emission with flat wave front, mixing reference and object beams and projecting interference pattern into recording plane
Patent Assignee: CHERNOVITSY UNIV (UYCH-R)
Inventor: MEDUZHKO M A; STAINADKO M T; USHENKO A G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
SU 1640542	A	19910407	SU 4682299	A	19890420	199149	B

Priority Applications (No Type Date): SU 4682299 A 19890420

Abstract (Basic): SU 1640542 A

The device uses an emission source (1) giving a highly coherent emission with a flat wavefront, a beam-splitter (2), rotating mirrors (3,4), an optical mixer (5), a magneto-optical modulator (6), an analyser (7) and a photomultiplier (8).

A reference and an object beam are formed and the interference pattern is projected into the recording plane. The distribution of the polarisation intensity and azimuths in the zero band is measured and are used to determine the optical anisotropy and the height of the micro-unevennesses in the surface of the specimen.

USE/ADVANTAGE - Optical anisotropy can, e.g. in crystal-optics, semiconductors etc., be determined with enhanced accuracy due to the range of linear measurements of intensity, corresponding to four orders of magnitude of the change in intensity in the zero band of the

interference pattern. The range of applications for the method is extended because it is possible to measure the height of micro-unevennesses in the surface of the specimen. Bul.13/7.4.91. (2pp Dwg.No.1/1)
Derwent Class: S02
International Patent Class (Additional): G01B-011/30

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Status: Signed Off. (3 minutes)